



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,364	01/30/2004	John P. Vanderhoef	2601.105	7921
7590 Jerry M. Presson 95 Golden Hill Road Trumbull, CT 06611		12/28/2006	EXAMINER GILBERT, WILLIAM V	
			ART UNIT 3635	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/28/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/769,364	VANDERHOEF, JOHN P.	
	<b>Examiner</b>	<b>Art Unit</b>	
	William V. Gilbert	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 30 January 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,5,16-20 and 22-28 is/are rejected.
- 7) Claim(s) 2-4,6-15 and 21 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 1/30/04.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

Art Unit: 3635

**DETAILED ACTION**

This is a First Action on the Merits. Claims 1-28 are pending and examined as set forth below.

***Claim Objections***

1. Claim 16 is objected to because of the following informalities: Examiner believes a misplaced comma, page 19, line 11 and misspelled "interlocks", line 11 which Examiner believes Applicant intended "interlock". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 1 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claims 1 and 16 contain prolix. A Claim may be rejected for prolix when the claims contain such long recitations that the metes and bounds of the claimed subject matter cannot be

Art Unit: 3635

determined. See MPEP 2173.05(m). The Examiner has concluded that Applicant claims a tile, yet the limitations in the claims are confusing to the extent that the metes and bounds of the claimed limitations cannot be determined. Applicant should amend these claims so the metes and bounds may be determined.

No new matter may be entered.

For example, Claim 1: Applicant claims "male **elements**", page 15, line 16, claims "said **second** interlock sets", line 16, claims "inner and outer laterally spaced **sidewalls**", line 18, then claims "said second element sidewalls". This language is unclear as to what Applicant is referring, especially as to which "sidewall": the inner or outer sidewall. Another example is Claim 1: "said second interlock pair", page 15, line 23. Applicant Claims "**interlock** elements", page 15, line 3, and "**pair** of support edges", line 9. It is unclear to what Applicant is referring. Another example is Claim 16: Applicant claims "first pair of adjoining interlock edges", page 19, line 7, and then refers to, at least how the Examiner interprets, the "first pair of edges". Another example in Claim 16: Applicant claims "first and second **interlock** support edges", page 19, line 7, later claims "a plurality of longitudinally disposed **first** and **second structures**", line 13, then refers to "said first and second **interlock structures**" line 19. Again, it is unclear to

Art Unit: 3635

what Applicant is referring in "interlock structures": the "interlock support edge" or the "structures". It is lack of consistency that is throughout the claims that makes these independent claims and dependent claims confusing so as be interpreted by one of ordinary skill in the art.

**Claim 1** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear as to how, at least according to reading Claim 1 along with the drawings, the "top surfaces of the first pair of support edges extending substantially flush with the top surface of said central portion," page 14, lines 14-16, and then later have "said first and second sets of interlocks on said first pair of said support edges facing the plane of the top tile surface...", page 15, lines 7, 8. The same applies for "said first and second set of interlocks on said second pair of said support edges facing the plane of the bottom tile surface", page 15, lines 8, 9. Clarification is required.

**Claim 1** recites the limitation "a plurality of second sets of adjoining male and female disposed", lines 4, 5. Examiner is not sure as to what "male and female" limitations Applicant is

Art Unit: 3635

referring. Examiner assumed Applicant intended "male and female interlocks".

**Claim 1** recites the limitation "second set of interlocks" in page 15, line 7, "said male interlocks" on line 10, "the male elements of said first interlock sets", lines 13, 14 and "the male elements of said second interlock sets", line 16. There is insufficient antecedent basis for these limitations in the claim.

**Claim 5** recites the limitations "said opposing surfaces" in line 1, and "said channel" on lines 1, 2. There is insufficient antecedent basis for these limitations in the claim. It is unclear if Applicant is referring to "contiguous channel" Claim 4, line 1, or "continuous open-ended channel", Claim 4, line 2.

**Claim 16** recites the limitation "the sidewalls" in page 19, line 14 and "**said** structures on the surface of **said** second pair of edges" on line 15. There is insufficient antecedent basis for these limitations in the claim.

**Claims 17, 18, 19, 20 and 23** recite the limitation "said first walled structure[s]" in Claim 17, lines 1, 2, Claim 18, lines 1, 2, Claim 19, line 3, Claim 20, line 2 and Claim 23,

Art Unit: 3635

line 1. There is insufficient antecedent basis for this limitation in the claim.

**Claims 22, 24 and 25** recite the limitation "said second walled structure" in Claim 22, lines 1, 2, Claim 24, lines 1, 2 and Claim 25, lines 1, 2. There is insufficient antecedent basis for this limitation in the claim..

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 26-28** are rejected under 35 U.S.C. 102(b) as being anticipated by Austin (U.S. Patent No. 5,630,304).

Claim 26: Austin discloses an edge interlock system (Figure 2, element 13) having a plurality of male interlock elements (see element "A" from attached Figure 2 from Austin, below), at an equal first spaced apart distance from one another along a mid section of the edge, a second plurality of male elements (see "B" below) at a second spaced distance, and the second

Art Unit: 3635

distance is greater than the first distance, with inverted identical interlock systems (Figure 2, element 41).

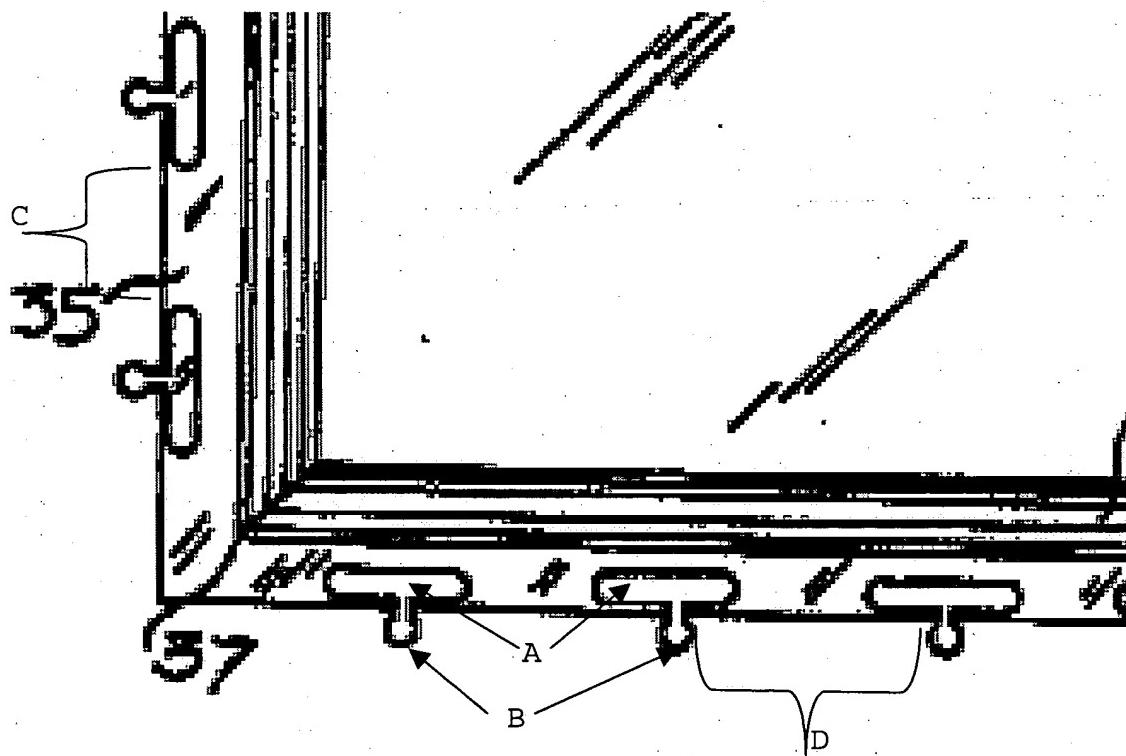


Figure 2 from Austin

Claim 27: a first open channel section ("C" above) traverses along the edge between the first interlock elements ("A" above) and a second channel ("D" above) is between the second elements and the second channel has a greater width than the first channel, and it extends from the mid-section.

Art Unit: 3635

Claim 28: the second interlock elements ("B" above) are disposed adjacent opposite ends of the edge (Figure 2, generally).

**Allowable Subject Matter**

4. **Claims 1 and 16** are allowable subject to further review once the rejections from 35 U.S.C. 112 are addressed.

Claim 1: the prior art of record does not disclose the second interlock sets as having a wall member as having inner and outer laterally spaced sidewalls with the wall member extending transversely between the inner and outer edges of the support edge.

Claim 16: the prior art of record does not disclose structures on the first pair of edges having inner and outer spaced apart sidewalls traversing the support edge from which it projects, and the inner sidewall of each second structure forms an open-ended cavity.

**Claims 2-15 and 17-25** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Further review will be required once the 35 U.S.C. 112 rejections have been addressed.

**Conclusion**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Johnston (U.S. Patent No. 3,077,426), Macdonald (U.S. Patent No. 6,526,705), Skandis (U.S. Patent No. 6,098,354), Stegner et al. (U.S. Patent No. 6,751,912), Collette (U.S. Patent No. 4,287,693), Bushey et al. (U.S. Publication 2003/0093964), Council et al. (U.S. Patent No. 5,950,378), Ettlinger, Jr. et al. (U.S. Patent No. 3,909,996), Austin, (U.S. Patent No. 5,907,934), Carling et al. (U.S. Patent No. 5,992,106).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William V. Gilbert whose telephone number is 571.272.9055. The examiner can normally be reached on Monday - Friday, 08:00 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Naoko Slack can be reached on 571.272.6848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3635

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WVG 2/21/06  
12/21/06

Brian K. Miller  
Examiner  
12/21/06